



# City of Tempe

## INTELLIGENT TRANSPORTATION SYSTEM SIGNAL TECHNICIAN I+

### JOB CLASSIFICATION INFORMATION

<i>Job Code:</i>	188	<i>FLSA Status:</i>	Non-Exempt
<i>Department:</i>	Engineering & Transportation	<i>Salary / Hourly Minimum:</i>	\$23.852404
<i>Supervision Level:</i>	Non-Supervisor	<i>Salary / Hourly Maximum:</i>	\$32.200962
<i>Employee Group:</i>	NSU	<i>State Retirement Group:</i>	ASRS
<i>Status:</i>	Classified	<i>Market Group:</i>	ITS Signal Technician II+
<i>Drug Screen / Physical:</i>	Y	<i>EEO4 Group:</i>	Technicians

### DISTINGUISHING CHARACTERISTICS

This is the entry level class in the ITS Signal Technician series. This class is distinguished from the ITS Signal Technician II+ by the performance of the more routine tasks and duties assigned to positions within the series.

### REPORTING RELATIONSHIPS

Receives supervision from higher level supervisory and management staff. Receives functional and technical direction from crew lead.

### MINIMUM QUALIFICATIONS

<i>Experience:</i>	Two years of experience in the installation, maintenance and repair of electronic control devices, preferably including traffic signal systems.
<i>Education:</i>	Equivalent to the completion of the twelfth grade supplemented by specialized training in electronics or degree related to the core functions of this position. An Associate's degree in Electronics is highly desirable.
<i>License / Certification:</i>	<ul style="list-style-type: none"><li>• Must possess and maintain a valid driver's license.</li><li>• Possession of, or required to obtain within twelve (12) months of hire, a Work Zone Safety Certificate, Electronic or Electrical Technician Certificate and a Level I International Municipal Signal Association (IMSA) Certification.</li></ul>

### ESSENTIAL JOB FUNCTIONS

Essential job functions are the fundamental duties of a position: the things a person holding the job absolutely must be able to do.

To actively support and uphold the City's stated mission and values. To perform highly technical work in the installation, operation and maintenance of electrical, electronic and digital controlled traffic signal control devices and lighting systems.

## OTHER DUTIES AS ASSIGNED

Please note this job description is not designed to cover or contain a comprehensive listing of all activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities and activities may change at any time with or without notice.

- Perform job duties adequately and properly; follow personnel and department policies and operating procedures; show respect, tact, and courtesy in dealings with coworkers and the general public; behave in a manner that does not obstruct or hinder other employees from completing their duties; act in a manner that is safe and follow the City's safety procedures at all times.
- Troubleshoot, repair and maintain traffic signal control devices, ITS/Communication systems and auxiliary equipment including analog, digital, wireless, electronic, and microprocessors.
- Repair or replace damaged signal equipment such as signal poles, signal and pedestrian heads, and push buttons.
- Perform a variety of preventive maintenance duties including changing signal bulbs, cleaning reflectors and refractors, painting poles, and cleaning signal control cabinets.
- Install, maintain and repair pre-timed, semi-automatic, fully automatic, electro-mechanical, electronic and digital controllers, auxiliary equipment, and similar devices.
- Assist in wiring new intersections according to wiring specifications.
- Install and test solid state digital electronic devices in cabinets according to system schematics.
- Repair roadway lighting systems at signal intersections and various other locations.
- Coordinate signal related repairs and installations with other City divisions and departments as well as outside agencies and contractors; work with Fire Department in installing and testing new and existing fire preemption circuits; work with phone company to troubleshoot central system communication circuits.
- Design, build, test and install electronic auxiliary timing circuits and auxiliary circuits.
- Develop, implement and document preventive maintenance programs to minimize future problems and to keep the traffic signal system in optimum operating condition.
- Test, recertify and/or replace ITS and traffic signal components to industry standards including MMU's, BIU'S, signal controllers, and light rail components.
- Participate in the scheduling of traffic signal and lighting construction projects by coordinating personnel, materials and equipment.
- Perform aerial work and repair malfunctioning traffic signals, CCTV, wireless radio, and street lights.
- Receive and respond to trouble calls during normal work schedule, evenings, weekends and special events.
- Create and close electronic work orders.
- Install traffic cones and barricades; direct and control traffic during normal work schedule, evenings, weekends and special events.

- Maintain computerized time, material and equipment use records.
- Blue stake traffic signal systems, including fiber optic cable, traffic signal cable, and communication system cables.
- Maintain, troubleshoot, and repair current and future ITS infrastructures such as CCTV cameras, fiber optics, vehicle detection, and microwave communications systems and devices.
- Maintain light rail transportation systems including Pier to Pier communication, LRT priority pre-emption, and train operator signals.
- Perform related duties as assigned.
- Physically present to perform the duties of the position.

## PHYSICAL DEMANDS *AND* WORK ENVIRONMENT

- Lift heavy objects (less than 50 lbs);
- Move heavy objects with forklift, dolly, etc.;
- Operate city vehicles (i.e. pick-up truck);
- Use power tools (i.e. jackhammers, drills, vacuums, cut off saws, circular saw, etc.);
- Use tools (i.e. screwdrivers, wrenches, shovels, picks, DVOM meters, handset phones, socket and ratchets, smack wrenches, sledge hammers etc.);
- Climb stairways, ladders, and work on elevated structures;
- Traverse uneven surfaces;
- Traverse long distances during workday with or without an accommodation;
- Other physical labor essential to the classification (i.e. move equipment, set up traffic control, push disabled cars out of road, replace and repair damaged equipment);
- Work in a stationary position for considerable periods of time;
- Operates computers, calculators and other office machines;
- Extensive reading and close vision work;
- Work in confined areas;
- Work out-of-doors in inclement weather;
- Exposure to heat, cold, dampness, dust, pollen, odors, fumes, etc.;
- Exposure to hazards of electrical shock, falls, noise, equipment operation, etc.;
- Exposure to blood and airborne pathogens; bodily fluids; etc.;
- Exposure to chemicals, petroleum products, cleaning agents, fumes, etc.;
- May require working extended hours;
- May work alone for extended periods of time.

## COMPETENCIES

<i>CLASSIFICATION LEVEL</i>	<i>INCLUDES</i>	<i>COMPETENCIES</i>
Foundational	All Employees	Inclusion, Communication, Interpersonal Skills, Integrity, Professionalism, and Willingness to Learn
Non-Supervisory	In Addition >	Teamwork, Customer Service, Initiative, and Dependability / Reliability

Supervisory	In Addition >	Staffing, Monitoring Work, Delegating, Development / Mentoring, and Support Others
Manager	In Addition >	Preparing / Evaluating Budgets, Monitoring / Controlling Resources, and Motivating / Inspiring
Deputy Director	In Addition >	Entrepreneurship and Networking
Director	In Addition >	Organizational Vision
<p><i>For more information about the City of Tempe's competencies for all classifications:</i>  <a href="#">City of Tempe, AZ : Competencies</a></p>		

## JOB DESCRIPTION HISTORY

*Effective November 1988*

*Reviewed October 1995*

*Revised August 2003 (revised duties)*

*Revised December 2005*

*Revised April 2017 (revised job title, job duties, & min quals)*

*Revised May 2017 (added physical/mental activities)*

*Revised March 2019 (PW Reorg – moved to Engineering & Transportation Department)*